T. TOSTEVIN.

VEHICLE-BODY.

No. 192,953. Patented July 10, 1877.

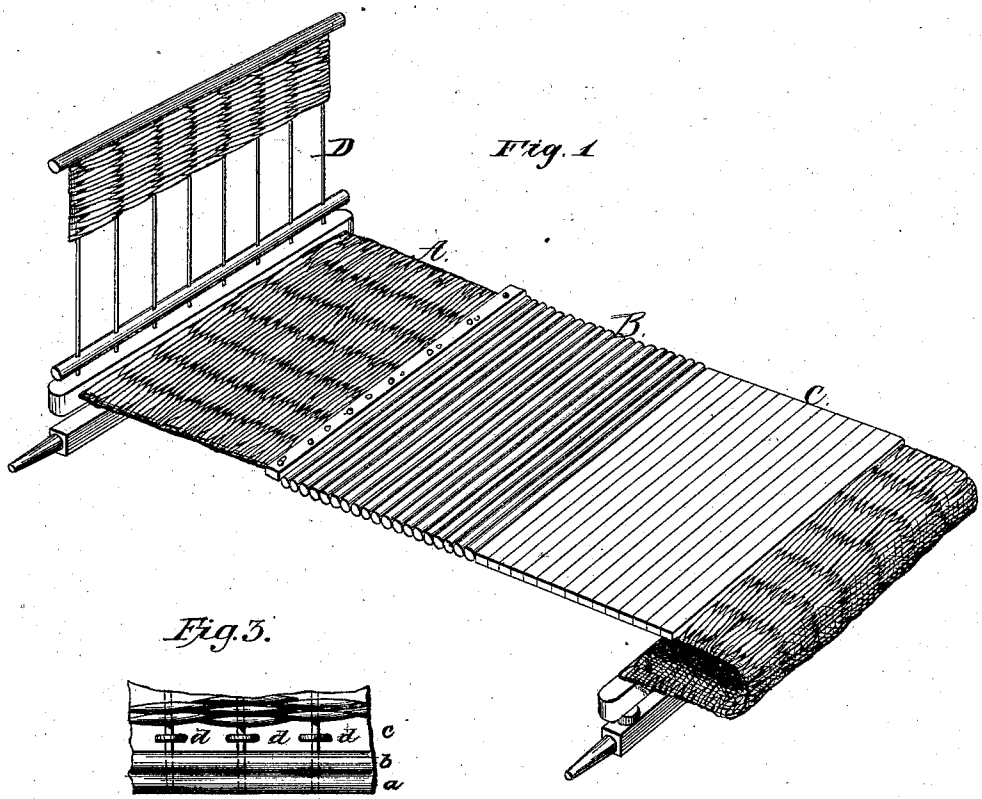


Fig. 1

Fig. 3.

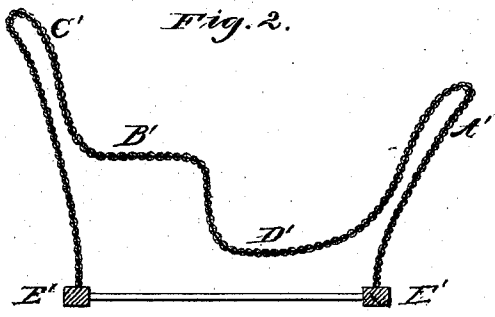


Fig. 2.

Witnesses

Frank Brown

Chas. S. Gould

Inventor

Thos. Tostevin

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

THOMAS TOSTEVIN, OF NEW YORK, N. Y.

IMPROVEMENT IN VEHICLE-BODIES.

Specification forming part of Letters Patent No. 192,953, dated July 10, 1877; application filed June 29, 1877.

To all whom it may concern:

Be it known that I, THOMAS TOSTEVIN, of New York city, New York, have invented certain Improvements in Vehicles, of which the following is a specification:

My invention relates to carriages, whether for children or of the ordinary size; and it consists in forming the entire body of a certain woven or slatted fabric, described hereinafter, in such manner that the ordinary springs of steel may be dispensed with, the material forming the body containing within itself all the elasticity needed.

Referring to the accompanying drawings, Figure 1 shows an isometrical perspective view of my invention, and Fig. 2 a section of the same fabric bent into shape to form the entire body and seat. Fig. 3 is a detail view.

In the drawing, A indicates the fabric which I employ. This material is the same as that patented by me upon the 19th day of October, 1875, Patent No. 169,064. It consists of a warp of elastic steel wires, any suitable number of which may be used, with a weft of any suitable fibrous material. These wires, after the fabric is woven, may be bent into any desired shape, and I propose, in some instances, to so bend them as to form the entire body and seat of a wagon or carriage, in manner similar to that shown in Fig. 2, which shows the dash, floor or body, and the seat, all formed of one continuous strip, with the axles attached at either end without the intervention of springs. Thorough experiment has shown that this fabric, when formed in this way, not only possesses all the elasticity necessary to render the wagon easy, but is durable and of beautiful appearance. It is evident that instead of bending the material, as shown in Fig. 2, it may be made perfectly straight, or level, like the "buckboards" in common use, as seen in Fig. 1.

Instead of using the woven fabric seen at A in the drawing, I propose, in some cases, to employ a slatted fabric or material, which is shown at B C. This I make of narrow slats of wood, either rounded at the corners or perfectly square. These slats are strung upon a series of elastic steel wires, or they may, if desired, be supported by a series of thin flat steel springs running, like the wires, through the slats in small perforations made for the purpose. Or, instead of the wire passing through perforations, staples may be driven into the under surface of the slats and the wires passed through them, as seen in Fig. 3, where *d d d* indicate staples passing into the under faces of the slats *c*, with the wires passing through them, while *a b* show the slats with wires passing through perforations. These slats, when placed on the wire, are closely pressed against each other, and confined in that position.

Fig. 2 of the drawing shows one form of my invention, of which I have already spoken. The material is bent or carried from the axle E upward to form the dash, then bent sharply over and carried down to the level of the floor D; thence it is again bent upward and then rearward to form the seat B′, and again upward to form the back C′, and finally downward to the rear axle E′. These bends, and the general form of the body, cause the structure to yield readily and with perfect elasticity, while, as each part of the whole is as elastic as any other, the carriage-body possesses great strength, and affords a comfortable, luxurious support to the body. It is evident that, being able, as I am, to dispense with the costly springs usually employed, I greatly decrease the cost of production without taking into account the fact that the material I employ is itself cheap, durable, strong, and of ornamental appearance. It is also well known that from the material usually employed in carriages the weight upon the springs, being very great, frequently causes them to break, while in children's carriages, made of wicker or splints, the least injury to one strand causes a speedy disintegration of the whole. In my invention the nature of the material produces a very light structure, possessing within itself all necessary elasticity, and so made that a break or tear in one part, should it occur, will not extend throughout the rest.

In producing the form shown in Fig. 1, I may form the dash separately, of the same fabric as that used in the body. In this case, as well as in attaching the body to the axles, the wires composing the warp are passed into perforations formed in the bar, and may, if desired, be passed completely through and

clinched at their ends upon the under side, as shown at D in Fig. 1, which shows the mode of attaching the dash, but does not exhibit the clinched ends of the wires.

Having described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. A body for wagons or children's carriages, composed entirely of a woven fabric, consisting of a warp of elastic steel wires, with a weft of any suitable fibrous material, said fabric being attached directly to the axles, or fifth-wheel bars, without the intervention of springs, as and for the purpose set forth.

2. A wagon or carriage body composed entirely of the woven or slatted fabric described, attached to the running-gear, and bent into form to compose the dash, floor, seat, and back in one continuous piece, as and for the purpose set forth.

3. A dash-board for wagons or carriages, constructed of the woven or slatted fabric described, as and for the purpose set forth.

THOS. TOSTEVIN.

Witnesses:
HAROLD G. UNDERWOOD,
CHAS. G. GOULD.